

Claims

1 1. A method of summarizing a search result abstract on a client computer
2 comprising the steps of:

3 initializing search parameters including defining a zoom level to define a search
4 window comprising one or more words within the search result abstract;
5 searching a first word within the search window to determine whether it is an
6 indexable word; and
7 adjusting the search parameters to move the search window throughout the search
8 result abstract until a last search window is searched for an indexable word.

1 2. The method of claim 1 further includes the step of displaying all indexable
2 words found in the search result abstract.

1 3. The method of claim 1 wherein the step of initializing search parameters further
2 includes engaging a zoom function.

1 4. The method of claim 1 wherein the step of initializing search parameters further
2 includes setting a base index value.

1 5. The method of claim 4 wherein the step of initializing search parameters further
2 includes setting the base index at an initial value of 1 such that a first word of the
3 search result abstract within the search window is determined to be an indexable word.

1 6. The method of claim 1 wherein the step of initializing search parameters further
2 includes the step of setting an offset value.

1 7. The method of claim 1 wherein the step of initializing search parameters further
2 includes the step of determining a maximum search window

1 8. The method of claim 1 wherein the step of initializing search parameters further
2 includes the step of determining a skip value.

1 9. The method of claim 1 wherein the step of searching the words within the search
2 window for an indexable word comprises searching a word at a base index within the
3 search window to determine whether the word at the base index is an indexable word.

1 10. The method of claim 1 wherein the step of searching the word at the base index
2 within the search window for an indexable word does not locate an indexable word, the
3 method further includes the steps of:

4 setting an index at a word within the search window to a value equal to the base
5 index and an offset value within a maximum search window;
6 determining whether the word at the index is an indexable word; and
7 determining whether to set the base index at the word to the index if the word at the
8 index is an indexable word.

1 11. The method of claim 10 wherein the step of determining whether a word at the
2 index is an indexable word does not locate an indexable word at the index, then the step
3 of determining whether a random number within the maximum search window may be
4 selected to obtain an another offset value occurs, the random number being greater than
5 a negative value of the maximum search window and less than a value of the maximum
6 search window.

1 12. The method of claim 11 wherein the step of determining whether a random
2 number within the maximum search window may be selected to obtain an another offset
3 value does not indicate that a random number may be selected, then the step of
4 adjusting the offset value until a new index is obtained occurs.

1 13. The method of claim 10 further including the step of searching within a
2 subsequent search window for an indexable word.

1 14. A method of locating indexable words within a search result abstract retrieved
2 from a search engine comprising the steps of:

3 assigning a sequential number to each word of the search result abstract;
4 determining a zoom level;
5 defining a maximum search window based on the zoom level;
6 setting a base index at a first word of the search result abstract wherein the base
7 index has an initial value of one, the base index being a focal point of the
8 maximum search window;
9 searching for an indexable word at the base index;
10 searching for an indexable word within the search window when the first word at
11 the base index is not an indexable word;
12 setting the base index at other words within the search window to establish a
13 subsequent search window and searching for indexable words within the
14 subsequent search window; and
15 displaying a condensed abstract comprising found indexable words in the search
16 result abstract.

1 15. The method of claim 14 further including the step of determining whether to fix
2 the base index at a found indexable word as a basis for the step of setting the base index
3 at other words within a subsequent search window.

1 16. The method of claim 14 wherein the step of searching for indexable words
2 within the search window comprises searching a number of words right and left of the
3 base index within the maximum search window for an indexable word.

1 17. The method of claim 14 wherein the step of setting the base index at other
2 words to establish a subsequent search window and searching for indexable words
3 within the subsequent window comprises adjusting the base index by a skip value to
4 obtain a new focal point for a subsequent search window.

1 18. The method of claim 14 wherein the step of setting the base index at other
2 words to establish a subsequent search window and searching for indexable words
3 within the subsequent window comprises adjusting the base index by an offset value to
4 obtain a new focal point for a subsequent search window when a word at the index is
5 not an indexable word.

1 19. A method of dynamically generating differing levels of detail in a search result
2 abstract on a user computer comprising the steps of:

3 engaging a zoom function;
4 determining a zoom level as set by a user of the user computer;
5 determining whether a random window flag is set;
6 assigning sequential numbers to each word of the search result abstract;
7 initially setting a base index at a first word of the search result abstract;
8 initially setting an offset value as a word at the base index;
9 determining a maximum search window based on a value of the zoom level;
10 determining a skip value based on the zoom level;
11 determining whether a fix base index flag is set;
12 searching a first maximum search window for an indexable word at the base index;
13 searching subsequent maximum search windows for an indexable word at an index
14 comprising the base index and the offset value;
15 determining whether the offset value is greater than a value of the maximum search
16 window wherein if the offset value is greater than the value of the maximum

17 search window, then setting the index at a word corresponding to a value of the
18 base index and the skip value;
19 determining whether a word at the index is an indexable word wherein if the word
20 at the index is not an indexable word, then adjusting the offset value such that
21 another word is at the index;
22 setting the base index to the indexable word at the index when the fix base index
23 flag is set; and
24 setting the index to the word corresponding to a value of the base index and the skip
25 value when the fix base index flag has not been set.

1 20. The method of claim 19 wherein the step of adjusting the offset value comprises
2 the steps of:

3 picking a random number within the maximum search window having a value
4 greater than a negative value of the maximum search window and less than a
5 value of the maximum search window when the random window flag has not
6 been set;
7 determining whether the offset value is equal to zero if the random window flag has
8 not been set;
9 obtaining another offset value by increasing the offset value by one if the offset
10 value is determined to be equal to zero;
11 determining whether the offset value is greater than zero if the offset value is not
12 equal to zero;
13 obtaining another offset value by multiplying the offset value by negative one and
14 adding one if the offset value is greater than zero; and
15 obtaining another offset value by multiplying the offset value by negative one if the
16 offset value is less than zero.

1 21. The method of claim 20 further including the step of continuing to search the
2 subsequent maximum search windows.

1 22. An article of manufacture comprising:
2 a computer usable medium having computer readable program code means
3 embodied therein for causing a computer to dynamically summarize a search
4 result abstract, the computer readable program code means in the article of
5 manufacture comprising:
6 computer readable program code means for causing a computer to initialize search
7 parameters including defining a search window comprising one or more words
8 within the search result abstract;
9 computer readable program code means for causing the computer to search the
10 words within the search window for an indexable word; and
11 computer readable program code means for causing the computer to adjusting the
12 search parameters to move the search window throughout the search result
13 abstract until a last search window is searched for an indexable word.

1 23. The article of claim 22 wherein the computer readable program code means for
2 causing the computer to search the words within the search window for an indexable
3 word further comprises:
4 computer readable program code means for causing a computer to set an index at a
5 word within the search window to a value equal to a base index and an offset
6 value when the computer readable program code means for causing the
7 computer to search the words within the search window for an indexable word
8 does not locate an indexable word;
9 computer readable program code means for causing the computer to determine
10 whether the offset value is greater than a maximum window value;

11 computer readable program code means for causing the computer to set the base
12 index to a value equal to the base index and a skip value if the offset value is
13 greater than a maximum window value;
14 computer readable program code means for causing the computer to determine
15 whether a word at the index is an indexable word if the offset value is not
16 greater than a maximum window value; and
17 computer readable program code means for causing the computer to determine
18 whether to set the base index at the word at the index if the word at the index is
19 an indexable word.

1 24. The article of claim 23 wherein the computer readable program code means for
2 causing the computer to determine whether a word at the index is an indexable word
3 further comprises:

4 computer readable program code means for causing the computer to determine
5 whether a random number within the maximum search window may be selected
6 to obtain an another offset value occurs, the random number being greater than
7 a negative value of the maximum search window and less than a value of the
8 maximum search window.

1 25. An article of manufacture comprising:

2 a computer usable medium having computer readable program code means
3 embodied therein for causing a computer to locate indexable words within a
4 search result abstract retrieved from a search engine, the computer readable
5 program code means in the article of manufacture comprising:
6 computer readable program code means for causing a computer to assign a
7 sequential number to each word of the search result abstract;
8 computer readable program code means for causing the computer to determine a
9 zoom level;

10 computer readable program code means for causing the computer to define a
11 maximum search window comprising one or more words based on the zoom
12 level;
13 computer readable program code means for causing the computer to set a base index
14 at a first word of the search result abstract wherein the base index has an initial
15 value of one, the base index being a focal point of the maximum search window;
16 computer readable program code means for causing the computer to search for an
17 indexable word at the base index;
18 computer readable program code means for causing the computer to search for an
19 indexable word within the search window when the first word at the base index
20 is not an indexable word;
21 computer readable program code means for causing the computer to set the base
22 index at other words to establish a subsequent search window and searching for
23 indexable words within the subsequent search window; and
24 computer readable program code means for causing the computer to display
25 indexable words in accordance with the zoom level.

1 26. An article of manufacture comprising:
2 a computer usable medium having computer readable program code means
3 embodied therein for causing a computer to dynamically generate differing
4 levels of detail in a search result abstract, the computer readable program code
5 means in the article of manufacture comprising:
6 computer readable program code means for causing a computer to engage a zoom
7 function;
8 computer readable program code means for causing the computer to determine a
9 zoom level;
10 computer readable program code means for causing a computer to determine
11 whether a random window flag is set;

12 computer readable program code means for causing a computer to assign sequential
13 numbers to each word of the search result abstract;
14 computer readable program code means for causing a computer to initially set a
15 base index at a first word of the search result abstract;
16 computer readable program code means for causing a computer to initially set an
17 offset value as a word at the base index;
18 computer readable program code means for causing a computer to determine a
19 maximum search window based on a value of the zoom level, the maximum
20 search window;
21 computer readable program code means for causing a computer to determine a skip
22 value based on the zoom level, the skip value equal to one less than twice the
23 value of the zoom level;
24 computer readable program code means for causing a computer to determine
25 whether a fix base index flag is set;
26 computer readable program code means for causing a computer to search a first
27 maximum search window for an indexable word at the base index;
28 computer readable program code means for causing a computer to search
29 subsequent maximum search windows for an indexable word at an index
30 comprising the base index and the offset value;
31 computer readable program code means for causing a computer to determine
32 whether the offset value is greater than a value of the maximum search window
33 wherein if the offset value is greater than the value of the maximum search
34 window, then setting the index at a word corresponding to a value of the base
35 index and the skip value;
36 computer readable program code means for causing a computer to determine
37 whether a word at the index is an indexable word wherein if the word at the
38 index is not an indexable word, then to adjust the offset value such that the
39 index is set to another word;

40 computer readable program code means for causing a computer to set the base index
41 to the indexable word at the index when the fix base index flag is set; and
42 computer readable program code means for causing a computer to set the index to
43 the word corresponding to a value of the base index and the skip value when the
44 fix base index flag has not been set.

1 27. The article of claim 26 wherein the computer readable program code means for
2 causing a computer to adjust the offset value such that the index is set to another word
3 comprises:

4 computer readable program code means for causing the computer to pick a random
5 number within the maximum search window having a value greater than a
6 negative value of the maximum search window and less than a value of the
7 maximum search window when the random window flag has not been set;

8 computer readable program code means for causing the computer to determine
9 whether the offset value is equal to zero if the random window flag has not been
10 set;

11 computer readable program code means for causing the computer to obtain another
12 offset value by increasing the offset value by one if the offset value is
13 determined to be equal to zero;

14 computer readable program code means for causing the computer to determine
15 whether the offset value is greater than zero if the offset value is not equal to
16 zero;

17 computer readable program code means for causing the computer to obtain another
18 offset value by multiplying the offset value by negative one and adding one if
19 the offset value is greater than zero; and

20 computer readable program code means for causing the computer to obtain another
21 offset value by multiplying the offset value by negative one if the offset value is
22 less than zero.